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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09 890,056	01 08 2002	Per- Ake Johansson	STOCK-02	5750

26875 7590 05 15 2003

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EXAMINER

STAFIRA, MICHAEL PATRICK

ART UNIT PAPER NUMBER

2877

DATE MAILED: 05/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/890,056

Applicant(s)

JOHANSSON ET AL.

Examiner

Michael P. Stafira

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-6, 13 and 14 is/are rejected.
- 7) ☐ Claim(s) 7-12 and 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Specification*

2. The disclosure is objected to because of the following informalities: In the claims and the specification there are numerous misspellings such as "emphasises" should be --emphasizes--.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1-6, 13 are rejected under 35 U.S.C. 102(a) as being anticipated by Migdal et al. ('288).

#### **Claim 1**

Migdal et al. ('288) discloses a method of determining a surface illuminated by incident light (Fig. 5, Ref. 104, 105, 501, 502) by recording the intensity in light reflected from the surface in a first image and by recording the intensity in light reflected from the surface in a second image taken with another angle of illumination and complementary to the first image (Col. 6-7, lines 53-5) (It is the position of the examiner that the flash sources in Migdal et al.

('288) are on opposite sides of each other and therefore would be at different angles from each of the images and reads on applicants claimed limitations); recording the intensity of only diffusely reflected light over the surface in the two images (Col. 6, lines 53-57); and determination of the difference between the recorded intensities of diffusely reflected light over the surface in the first and second images in order to obtain a representation that emphasizes variations in the gradient of the surface (Col. 8-9, lines 66-8). (It is the position of the examiner that the 3-D representation of an object acquired in Migdal et al. ('288) produces the same representation of applicant's limitation of gaining variations in the gradient of the surface).

#### **Claims 2 & 14**

The reference of Migdal et al. ('288) further discloses a derivative of the height function of the surface (Col. 8, lines 45-65). It is the position of the examiner that Migdal et al. ('288) discloses the height function since in determining the 3-D profile of the surface one would have to know the height functions to produce a profile, and therefore reads on applicant's limitation.

#### **Claim 3**

Migdal et al. ('288) further discloses that the difference is normalized by the division by a sum of the recorded intensities (Col. 8-9, lines 66-8).

#### **Claim 4**

The reference of Migdal et al. ('288) further discloses that the sum of the recorded intensities over the surface issued to obtain an essentially topographically neutral reflectance image of the surface (Col. 8, lines 46-65). It is the position of the examiner that since the reference of Migdal et al. ('288) only measures the diffusive specular information it is producing the same function as the claimed limitation.

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**Claim 5**

Migdal et al. ('288) further discloses that the intensity of the first image is recorded with light incident from a first direction and that the intensity of the second image is recorded with light incident from a second direction that is opposite to the reflection angle of the first direction (Col. 6-7, lines 53-5; See Fig. 5).

**Claim 6**

The reference of Migdal et al. ('288) further discloses calculating the derivative of the area (Col. 8, lines 45-65).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Migdal et al. ('288).

Migdal et al. ('288) discloses the claimed invention except for determining the topography of a paper surface. It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine Migdal et al. ('288) with topography of paper surface since it was well known in the art that one can use 3-D profiling to obtain many different profile of many different objects including a paper surface in order to improve quality of that object.

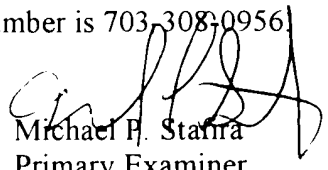
*Allowable Subject Matter*

6. Claims 7-12, 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Stafira whose telephone number is 703-308-4837. The examiner can normally be reached on 4/10 Mon.-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on 703-308-4881. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7721 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

  
Michael P. Stafira  
Primary Examiner  
Art Unit 2877

May 12, 2003